

02/11/99

Please type a plus sign (+) inside this box → ☒PTO/SB/05 (1/98)
Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.UTILITY
PATENT APPLICATION
TRANSMITTALAttorney Docket No. TESTP0101US
First Inventor or Application Identifier John C. Anderson et al.
Title INTERNET TEST-MAKING METHOD
Express Mail Label No. EJ464627519USAPPLICATION ELEMENTS
See MPEP chapter 600 concerning utility patent application contents.ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ * Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☒ Specification [Total Pages 17]
(preferred arrangement set forth below)
- Descriptive title of the Invention
 - Cross References to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to Microfiche Appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract or the Disclosure
3. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 26]
4. Oath or Declaration Not signed [Total Pages 2]
- a. ☐ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))
(for continuation/divisional with Box 17 completed)
(Note Box 5 below)
- i. ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference (useable if Box 4b is checked)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered to be part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Microfiche Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☐ Computer Readable Copy
- b. ☐ Paper Copy (identical to computer copy)
- c. ☐ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 C.F.R. § 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
10. ☐ English Translation Document (if applicable)
11. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
- * Small Entity
14. ☒ Statement(s) ☐ Statement filed in prior application, Status still proper and desired (PTO/SB/09-12)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☒ Other: Certification under 37 CFR 1.10

* A new statement is required to be entitled to pay small entity fees, except where one has been filed in a prior application and is being relied upon.

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:
- ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: _____

Prior application Information: Examiner _____

Group / Art Unit: _____

18. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label

(Insert Customer No. or Attach bar code label here)

or ☒ Correspondence address below

Name	Cynthia S. Murphy				
	Renner, Otto, Boisselle & Sklar, P.L.L.				
Address	Nineteenth Floor				
	1621 Euclid Avenue				
City	Cleveland	State	Ohio	Zip Code	44115
Country	U.S.A.	Telephone	(216) 621-1113	Fax	(216) 621-6165

Name (Print/Type)	Cynthia S. Murphy	Registration No. (Attorney/Agent)	33,430
Signature	Cynthia S. Murphy	Date	Feb. 11, 1999

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant or Patentee: Anderson et al. Attorney's Docket No. TESTP0101US

Serial or Patent No. _____

Filed or Issued: Herewith

For: INTERNET TEST-MAKING METHOD

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(c)) - SMALL BUSINESS CONCERN**

I hereby declare that I am

- ☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN Test.com, Inc.
ADDRESS OF CONCERN 1300 East Ninth Street, Suite 1310, Cleveland, Ohio 44114

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under §41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, the number of employees of the business concern is the average over the previous fiscal year of the concern of the person employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year; and concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the above entitled invention described in

- ☒ the specification filed herewith
☐ application serial no. _____, filed _____
☐ patent no. _____, issued _____

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed in the ☐ Appendix hereto, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING John C. Anderson, President

ADDRESS OF PERSON SIGNING 1300 East Ninth Street, Suite 1310, Cleveland, Ohio 44114

SIGNATURE  DATE 3/11/99

INTERNET TEST-MAKING METHOD

FIELD OF THE INVENTION

The present invention relates generally to a method of making a test and posting the test on-line for potential test-takers.

BACKGROUND AND SUMMARY OF THE INVENTION

Tests play a key role in everyday life around the world. In international business and education, a test is a standard vehicle for assessing proficiency, measuring aptitude or determining skill and knowledge. Virtually every profession requires proof of mastery through a licensing and certification test.

The present invention provides a method of making a test with images and sound files and posting the test on-line for potential test-takers. (In the context of the present application, "test" refers to any exam, assessment, survey, lesson plan, etc. comprising questions to be answered.) A host system and a plurality of remote terminals operatively coupled to the Internet are provided. Questions are input at one of the remote terminals by a test-maker. The questions are compiled into a test by the host system and then posted on-line for potential test-takers.

The step of posting the test on-line preferably includes placing the compiled test in a directory for access by potential test-takers. The directory preferably has a plurality of categories corresponding to different types of tests and the compiled test is placed in the appropriate category. For ease in administration, a just-made test is placed into a temporary category so that it may be later reviewed (by the proprietor of the host system) and placed in the most appropriate category. A test-maker is encouraged to provide input (e.g., via e-mail) as to the most appropriate category.

5 The test-taker may be charged for the taking of the test and, if so, it is desirable that the test-taker be able to preview the test that he/she selects from the directory. The test-maker and the proprietor of the host system preferably share the revenues generated by the test-taker taking the test. For example, the revenues could be split (i.e., 50/50).

10 The present invention additionally or alternatively provides a method of posting a test on-line for potential test-takers wherein the test is placed in a restricted directory. In this case, the test-taker is required to input a password to access the compiled test. The restricted directory may include tests made on-line and/or standardized tests directly input into the system. For example, the restricted directory could include academic practice tests and a school could enroll students at a set cost per school year. Alternatively, an institution could be charged based on each time a test is taken or each time the web site is visited.

15 These and other features of the invention are fully described and particularly pointed out in the claims. The following descriptive annexed drawings set forth in detail one illustrative embodiment, this embodiment being indicative of but one of the various ways in which the principles of the invention may be employed.

20 DRAWINGS

Figure 1 is a block diagram of a system according to the present invention.

Figure 2 is a block diagram of a host system.

25 Figure 3 is a block diagram of the software environment for one embodiment of the present invention.

Figure 4 is a flow chart of test-making and test-taking procedure.

Figures 5A-5M are web pages used during test-making.

Figures 6A-6F are web pages used during test-editing.

Figures 7A-7D are web pages used during test-taking.

Figures 8A-8B are web pages used during report-generating.

5

DETAILED DESCRIPTION

Referring now to the drawings in detail, and initially to Figure 1, a system 10 according to the present invention is shown. In the system 10, a host system 12 exchanges data with a plurality of remote terminals 14 and 16 through data transmission across telephone and data transmission lines 18. Data transmission on the host end utilizes a host gateway 20 which interfaces the host system 12 to the network with a protocol understood by the remote terminals 14 and 16 (or intermediary equipment connected thereto). For example, on the Internet, transmission control protocol/Internet protocol (TCP/IP) typically is used.

In the illustrated system 10, there are three "test-making" terminals 14 and three "test-taking" terminals 16. This is, of course, an extremely simplified version of the present invention. In actual implementation, the system 10 would include many more terminals 14 and 16. Specifically, for example, the preferred system 10 utilizes a network such as the Internet whereby thousands and thousands of users would access the system 10. Moreover, the test-making terminals 14 may also be test-taking terminals, and/or the test-taking terminals 16 may also be test-making terminals, at different times. In any event, prospective test-makers and/or test-takers gain access over the telephone and data transmission lines 18 to the host system 12 by contacting the host gateway 20. This contact can be established on a network such as the Internet by

sending data packets to an electronic address associated with the host system 12.

Referring now to Figure 2, the host system 12 is shown in more detail in block diagram. The host system 12 includes a controller 22 having a central processing unit (CPU) and associated read only memory (ROM). The ROM provides software instructions to perform basic operations upon power up of the system 12. Once the host system 12 receives these instructions, the CPU reads the operating system instructions stored on disk to configure the system and to permit execution of the applications programs.

The controller 22 is connected along data and address bus lines 24 to a random access memory (RAM) 26 and mass storage device 28. These components are operatively connected to input/output interface devices 30 which control various corresponding input/output devices 32. These I/O devices 32 include such conventional elements as a video display, a keyboard, a printer, and other input devices such as a mouse and a digitizer or scanner. The illustrated host system 12 includes a modem 34 to exchange information with remote terminals over standard voice lines, although devices could instead be used to transfer data between the host system 12 and the various remote terminals 14 and 16 of the system 10.

Referring now to Figure 3, the software configuration of the host system 12 is generally illustrated. The host system 12 operates under control of an operating system 36 that permits various application processes to be executed. These include a communications application 38 and a data management, storage, and retrieval application 40 (i.e., a database application). The communications application 38 permits data transfer with the remote terminals 14 and 16 whereby test-makers and test-takers may log onto the host system 12 and either make or take tests. The data base application 40 organizes the

information input by test-makers and test-takers and stores this organized information in one or more mass storage devices, such as the mass storage device 28 described above. Other applications 42 may also be included in the software environment.

5 Referring now to Figure 4 a flow chart of the preferred system 10 is shown. In the preferred embodiment, the host system 12 provides a home page 50 that is accessible to both potential test-makers and test-takers. This home page 50 allows the user to cast themselves as either a test-maker or test-taker. Preferably, the program loads in images and sound files associated with
10 the web page 50 and also the other web pages discussed below.

If the user is a test-maker, he/she is required to input an identifier, such as e-mail address, password, and/or account number, on a web page 52. The user's account is then verified and the test-maker is presented with a web page 54 whereat he/she chooses to make a new test, edit an existing test, or generate
15 a report. If the user does not yet have an account, one is set up and the test-maker is then presented with the web page 54.

If the test-maker decides to make a new test, he/she is then presented with a series of web pages generally indicated at 55 in Figure 4 and individually shown in detail in Figures 5A-5M. After making the test, it is placed in a
20 directory for access by potential test-takers, this directory preferably including a plurality of categories such as, for example, career, civil service, creativity, current events, educators, entertainment, etc. In the preferred and illustrated embodiment, the just-made test is temporarily placed in a "slush category" until it can be reviewed in detail to determine the most appropriate category. The test-
25 maker is encouraged to contact the proprietor of the host system 12 by e-mail, for example, to provide suggestions for the permanent category.

If the test-maker decides to edit an existing test, he/she is presented with a series of web pages illustrated schematically at 56 in Figure 4 and as shown in detail in Figures 6A-6F. Once the editing is complete, the revised or edited version of the test is placed back in the directory under its permanent category.

5 If the test-maker decides to generate a report, he/she is presented with a series of web pages illustrated schematically at 57 in Figure 4 and shown in detail in Figures 8A-8B.

As was indicated above, the home page 50 allows the user to cast himself as either a test-maker or a test-taker. If the user is a test-taker, he/she is also
10 required to input an identifier, such as e-mail address, password, and/or account number at 62. If the identifier is recognized by the host system 12, the directory of test categories is displayed on web page 64. Otherwise, an account is set up for the user and the web page 64 is displayed.

The test-taker chooses a category and the tests contained in this category
15 are displayed on web page 66. The test-taker then chooses a test and he/she is presented with the web pages shown schematically at 68 and shown in detail in Figures 7A-7E. Once the test is taken, certain data regarding the test-taker and the test are conveyed to the report storage. This data may include, for example, the identity of the test-taker, the score on the test, the time it took to complete
20 the test, and other relevant information.

The test-maker may provide his/her test for free to potential test-takers. Alternatively, the test-maker may decide to charge a test-taker per test. To this end, the host system 12 includes a procedure for opening an account for a test-taker. For example, the home web page 50 could include an account-opening
25 link on which the test-taker clicks to open an account. The test-taker would then be prompted to enter his/her e-mail address and to choose a password. To activate the account, a purchase link could be used to purchase electronic

credits via a credit card. For example, each credit could have a value of ten cents and a user could be required to purchase at least ten dollars worth of credits (i.e., one hundred credits). As the credits are spent on tests, they are automatically deducted from the test-taker's account. Once the account is depleted, the test-taker is preferably notified.

In the preferred system 10, the credits are shared between the test-maker and the proprietor of the host system 12. For example, a fifty-fifty split of the revenues could be made between the test-maker and the host system proprietor.

An account is opened for a test-maker in the same manner as described above for the test-taker (except that a purchase of credits may not be necessary). Since a user may be both a test-maker and a test-taker, a single user may both earn credits (from others taking a test that he/she made) and spend credits (by taking tests that others have made).

Referring now to Figures 5A-5M, the test-making web pages 55 are shown in detail. For ease in explanation, a very simplified test is used to demonstrate the principles of the invention. In actual use, tests may be much more complicated and lengthy.

The test-maker is initially provided with a web page having fields for inputting a test name, a header, and a footer. (Figure 5A.) The test name will be used to display or identify the test in the directory. Accordingly, the test name should be descriptive and interesting, but preferably relatively short. The header is typically explanatory text and will be shown on each page of the generated test. The footer is shown when the test is scored whereby it preferably includes information or ratings corresponding to different scores. This information is then entered by clicking on the "add" icon. (Figure 5B.) Alternatively, to start over, the test-maker may click on the "reset" icon.

5 The test-maker is then provided with a display including the quiz name, the header and the footer. (Figure 5C.) At this point a test number (13337) is assigned. Also, the enable function is set at "No" to prevent the test from being posted to test-takers prior to its completion. "Test Options" may be clicked on to allow the test-maker to put in certain test-taking criteria, such as time allotted for taking the test, persons authorized to take the test, and/or cost of taking the test. Once the test number is recorded by the test-maker, and the accuracy of the quiz name, header and footer are verified, the "Update Test " icon is clicked on to update the test. The test-maker then clicks at the appropriate place ("here") to add the question.

10 The test-maker is then provided with a web page for inputting questions. The web page preferably identifies the test number and provides fields for entering the question type, the question statement, the answer choices, the correct answer, the value of correct answers, and an explanation. (Figure 5D.)

15 The test-maker selects the question type (multiple choice is selected for question 1 in the illustrated example), inputs the question statement, inputs the answer choices, inputs the correct answer(s), assigns a value to the various possible answers, and inputs an explanation for the correct answer. (Figure 5E.) A display is then provided which shows the test description table and lists the question number, the type of question, and the question statement for each of the questions entered so far. (Figure 5F.)

20 As shown in Figures 5G-5L, the process is repeated as three more questions are inputted. In question number 2, the multiple choice question type is used to make a true/false question. (Figures 5G and 5H.) In question number 3, the short answer question type is selected and the complete answer is written out in different variations, namely, "four", "4", "four apples" and "4 apples". (Figures 5I and 5J.) In question number 4, a multiple answer question

type is selected and input . (Figure 5K and 5L.) It may be noted that although in the illustrated embodiment the questions are added one after the other, the order may be changed by clicking on the "Add After" icon in an intermediate question row. Also, to edit an existing question, the test-maker may click on the question number. (Figures 5H, 5J, and 5L.)

Once the desired number of questions are input, the enable field is set to "YES." (Figure 5M.) The test is then compiled and placed into the directory whereat it is available for potential test-takers.

Referring now to Figures 6A-6F, the test-editing web pages 62 are shown in detail. To identify the test to be edited, the test number assigned to the test (see Figure 5C, above) is input and the "Edit Test" icon is clicked. (Figure 6A.) The system 10 is designed so that a test can only be edited by its test-maker and the proprietor of the host system 12 if necessary.

The test-editing web page provides a display of the current name, header, footer, question number, question type, and question statement. (Figure 6B.) The non-question portions of the test, such as the quiz name, the header and/or the footer may then be edited. For example, in the illustrated embodiment, the first few words of the header have been edited. (Figure 6C.)

The questions may also be edited by clicking on the desired question number. For example, if "1" is clicked on, a web page will be provided displaying the particulars of the first question. (Figure 6D.) The question type, question statement, answer choices, correct answer and/or explanation may then be updated. For example, in the illustrated embodiment, the question statement is updated to clarify that "two apples fall out of the basket." (Figure 6E.) The "update" icon may then clicked to revise the question accordingly. A question may be deleted by clicking on the "delete" icon.

In the editing embodiment of the invention shown in Figures 6A-6E, the test is not enabled. In other words, the enable input is set at "No". After the editing is complete, the test may then be enabled by changing the enable input to "Yes". (Figure 6F.) The revised test will be then replace the "unedited" version of the test in the directory.

Referring now to Figures 7A-7D, the test-taking web pages 68 are shown in detail. Once the test-taker selects a test from the directory, a preview of the test is provided for the test-taker. (Figure 7A.) In the illustrated embodiment, the preview page shows the header, the question numbers and the question statements. To take the test, the test-taker clicks on the indicated icons.

The compiled test is then displayed to the test-taker. (Figure 7B.) Each question statement is followed by either answer choices (questions 1, 2 and 4) or a space for filling in the correct answer (question 3). The test-taker inputs his/her proposed answers to the questions and then clicks on the "Score It" icon. (Figure 7C.)

The test is then almost instantaneously scored and the test-taker is provided with the results. (Figure 7D) Each question is followed by a statement of the test-taker's inputted answer and the correctness thereof. If the test-taker inputted answer was incorrect, the explanation is provided (questions 1 and 4). The web page also provides a score board summarizing the number of correct answers, wrong answers, unanswered questions and the points associated therewith. The footer is provided under the score board to help the test-taker interpret his performance on the test.

Referring now to Figures 8A and 8B, the report-making web pages 57 are shown. Once the test-maker chooses to generate a report, an initial display is provided for the entry of data. (Figure 8A.) The report is then automatically generated by the host system 12 and displayed to the test-maker. (Figure 8B.)

As was explained above, the compiled test is placed in a directory under a category. In the preferred system 10, the directory includes a plurality of tests from a plurality of different test-makers. Some or all of these tests may have been compiled by a test-maker in the manner described above. However, preferably, this directory will also include practice exams and tests conventionally provided in a paper or book form. For example, the directory may preferably include professional licensing and certification tests and graduate school practice tests (i.e., SAT, ACT, GMAT, LASAT, TOEFL,). Additionally or alternatively the directory may preferably include pre-employment and employment tests such as programming and operating system tests, Office Proficiency Assessment & Certification tests, personality profiling tests, civil service practice tests, real estate license practice tests, investment tests, IQ tests, self-diagnosis tests, and career guidance tests. The directory may further include more entertainment-gearred tests such as puzzles, sports trivia quizzes, etc.

The tests in the directory may be available to anyone having, for example, Internet access. However, in certain settings, it may be desirable, or necessary for security reasons, to limit access to certain tests. For example, a corporation may want to limit its screening tests only to potential candidates. An educational or academic institution may wish to limit its test to certain students. In such cases, a restricted directory may be developed that functions as an Intranet and access thereto is limited by knowledge of a password. In this manner, the corporation or organization controls the content of its testing program and also the test-taking participants. Once a test has been taken by an authorized participant, the scores are immediately and automatically e-mailed to the administrator and/or they appear instantly online.

With a restricted directory, a corporation or organization may purchase tests, particular to its specific needs, from the general directory. Additionally,

the test-making method described above may be used to make tests regarding new product and services of the company. Also, opinion polls may be conducted within an organization with or without anonymity. With particular reference to educational settings, teachers and professors often wish to create their own tests during each teaching session to ensure integrity and to accommodate changing curriculum. As such, the test-making method described above, in combination with a restricted directory, is believed to be very advantageous to the academic community. Also, various organizations may "buy" and "sell" tests as a fund-raising activity and as a way to eventually end the tedious task of grading papers. In any event, a job candidate, employee or student simply needs a computer with Internet access and the required password to take the test, or participate in surveys.

The restricted directory is preferably provided by the proprietor of the host system 12 by charging a set-up fee and a certain amount per user per period of time. For example, if a restricted directory included SAT/ACT and Advanced Placement practice courses and tests, a high school could enroll students at ten dollars per student per school year. The enrolled students could then practice as often as necessary or desired. Alternatively, the restricted directory may be provided by charging per time a user takes a test, or per time a user visits the website.

One may appreciate that although the invention has been shown and described with respect to a certain preferred embodiment, obvious and/or equivalent alterations and modifications will occur to others skilled in the art upon the reading and understanding of this specification. The present invention includes all equivalent alterations and modifications and is limited only by the scope of the following claims.

What is claimed is:

1. A method of making a test and posting the test on-line for potential test-takers, said method comprising the steps of:

5 providing a host system and a plurality of remote terminals operatively coupled to the Internet;

inputting questions at one of the remote terminals;

compiling the questions at the host system to make a compiled test;

posting the test on-line for potential test-takers.

10 2. A method as set forth in claim 1 including the steps of providing a home page that is accessible to both potential test-makers and test-takers and that allows users to cast themselves as either a test-maker or a test-taker.

15 3. A method as set forth in claim 1 wherein the test-maker is required to input an identifier.

20 4. A method as set forth in claim 1 further including the steps of editing a compiled test.

5. A method as set forth in claim 1 wherein the step of posting the step includes placing the compiled test in a directory for access by potential test-takers.

25 6. A method as set forth in claim 5 wherein the directory has a plurality of categories corresponding to different types of tests and wherein the compiled test is placed in the appropriate category.

7. A method as set forth in claim 6 wherein the step of placing the compiled test in a directory includes the steps of placing a just-made test into a temporary category, reviewing the test to determine the appropriate category, and then placing the test into the appropriate category.

5

8. A method as set forth in claim 7 further comprising the step of receiving input from the test-maker as to the appropriate category.

9. A method as set forth in claim 5 wherein the test-taker chooses a test from the directory.

10

10. A method as set forth in claim 9 wherein the test-taker is allowed to preview the test chosen from the directory.

11. A method a set forth in claim 1 wherein a test-taker is required to pay to take the compiled test.

15

12. A method as set forth in claim 11 wherein the test-maker and the proprietor of the host system share the revenues generated by the test-taker taking the test.

20

13. A method as set forth in claim 1 wherein the compiled test is placed in a restricted directory and the test-taker must have know a password to access the compiled test.

25

14. A method of posting a test on-line for potential test-takers, said method comprising the steps of:

providing a host system and a plurality of remote terminals operatively coupled to the Internet;

placing a test in a restricted directory for potential test-takers;

requiring a test-taker to input a password to have access to the restricted directory.

15. A method as set forth in the preceding claim wherein the restricted directory includes academic practice tests and wherein a school enrolls students at a set cost per school year.

16. A method as set forth in claim 14 wherein the charge for the restricted directory is based on per time a test is taken.

17. A method as set forth in claim 14 wherein the charge for the restricted directory is based on per time a user visits the directory.

18. A system for generating and posting an on-line test, comprising:
a first computer operatively coupled to the Internet, the first computer including software means for generating the test and software means for posting the test on the Internet; and

a second computer operatively coupled to the Internet, the second computer operative to allow a user to take the test and receive test results.

19. A system for generating and posting an on-line test, comprising:
a host computer operatively coupled to a network backbone, the host computer including means for generating the test and means for posting the test;

a first computer operatively coupled to the host computer, the first computer being operative to generate questions for the test; and

a second computer operatively coupled to the host computer, the second computer operative to the take the test.

5

20. A system for generating and posting an on-line test, comprising:

host means, coupled to a network backbone, for generating the test and for posting the test;

means, operatively coupled to the host means, for generating questions for the test; and

10

means, operatively coupled to the host means, for taking the test.

ABSTRACT

A method of making a tests, assessments, surveys and lesson plans with images and sound files and posting them on-line for potential users. Questions are input by a test-maker and then the questions are compiled into a test by a host system and posted on-line for potential test-takers. The compiled test may be placed in a directory for access by the test-takers, the directory preferably having a plurality of categories corresponding to different types of tests and the compiled test is placed in the appropriate category. For ease in administration, a just-made test is placed into a temporary category so that it may be later reviewed (by the proprietor of the host system) and placed in the most appropriate category.

G:\DOCUMENT\CSM\TESTP0101\P0101US.pat.wpd / February 11, 1999

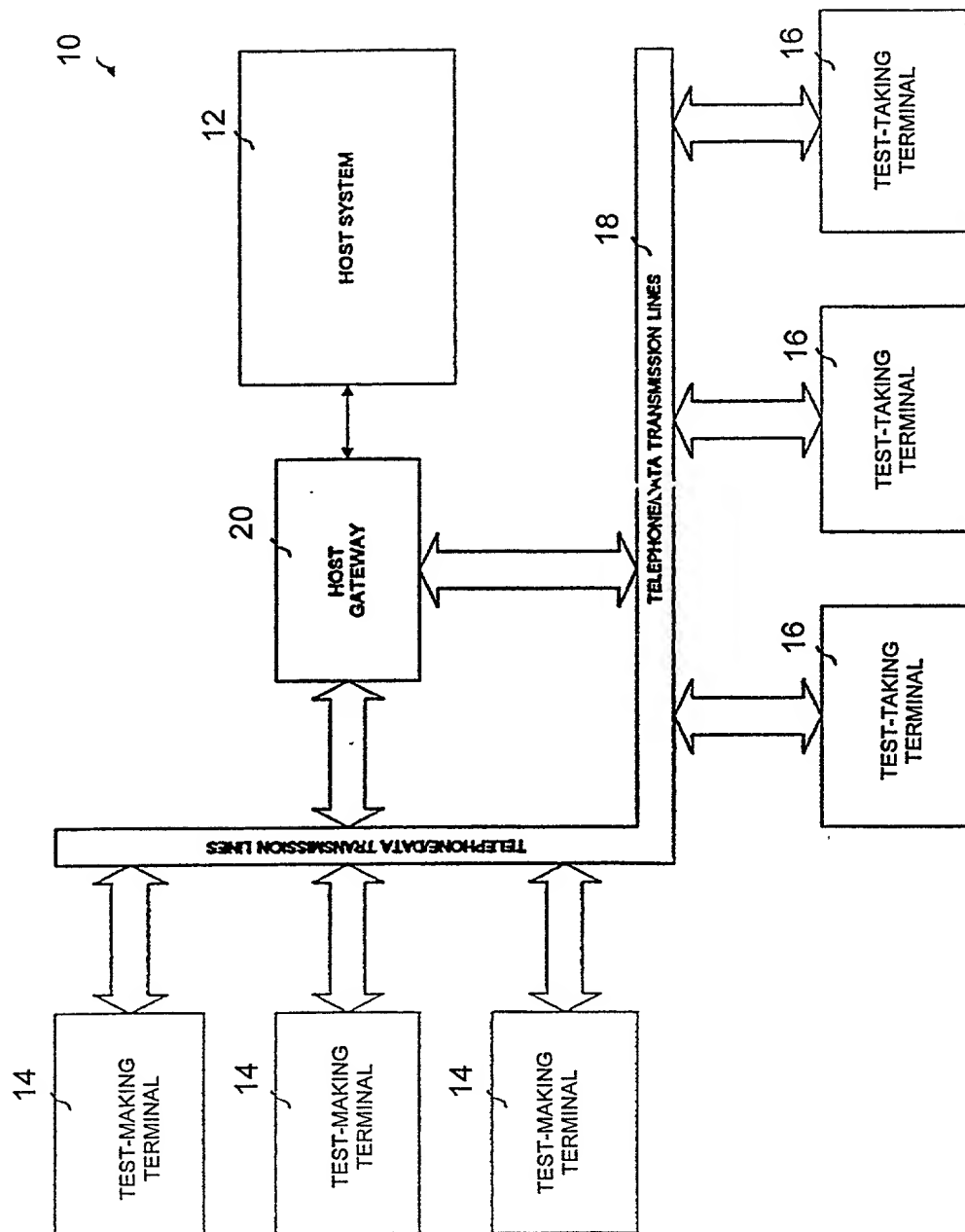


FIG. 1

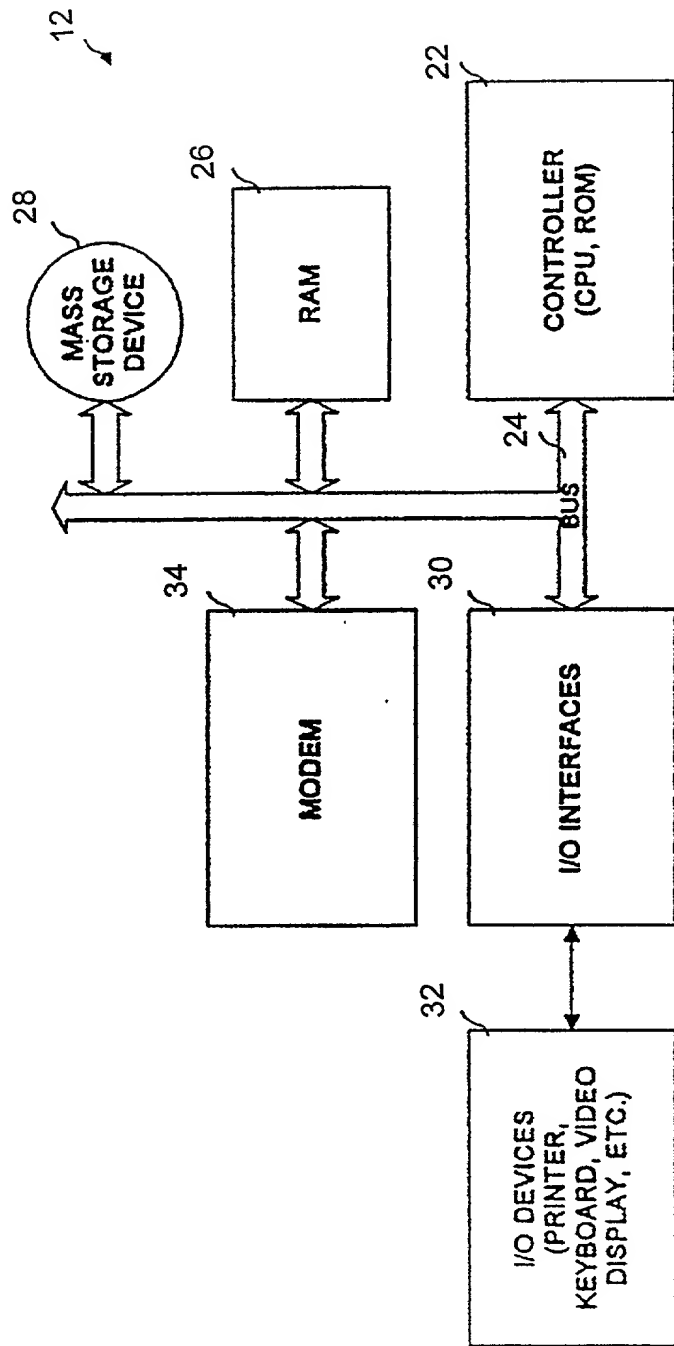


FIG. 2

66120 50434260

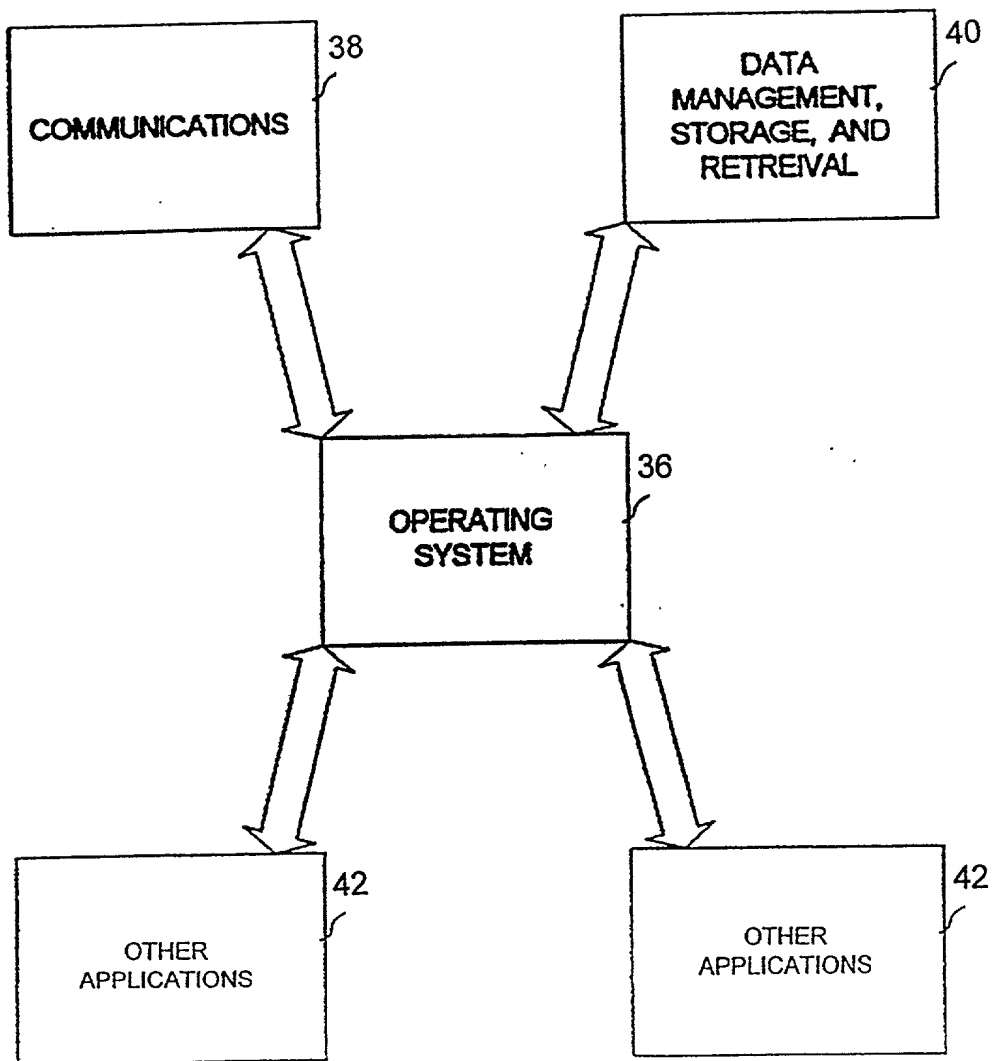


FIG. 3

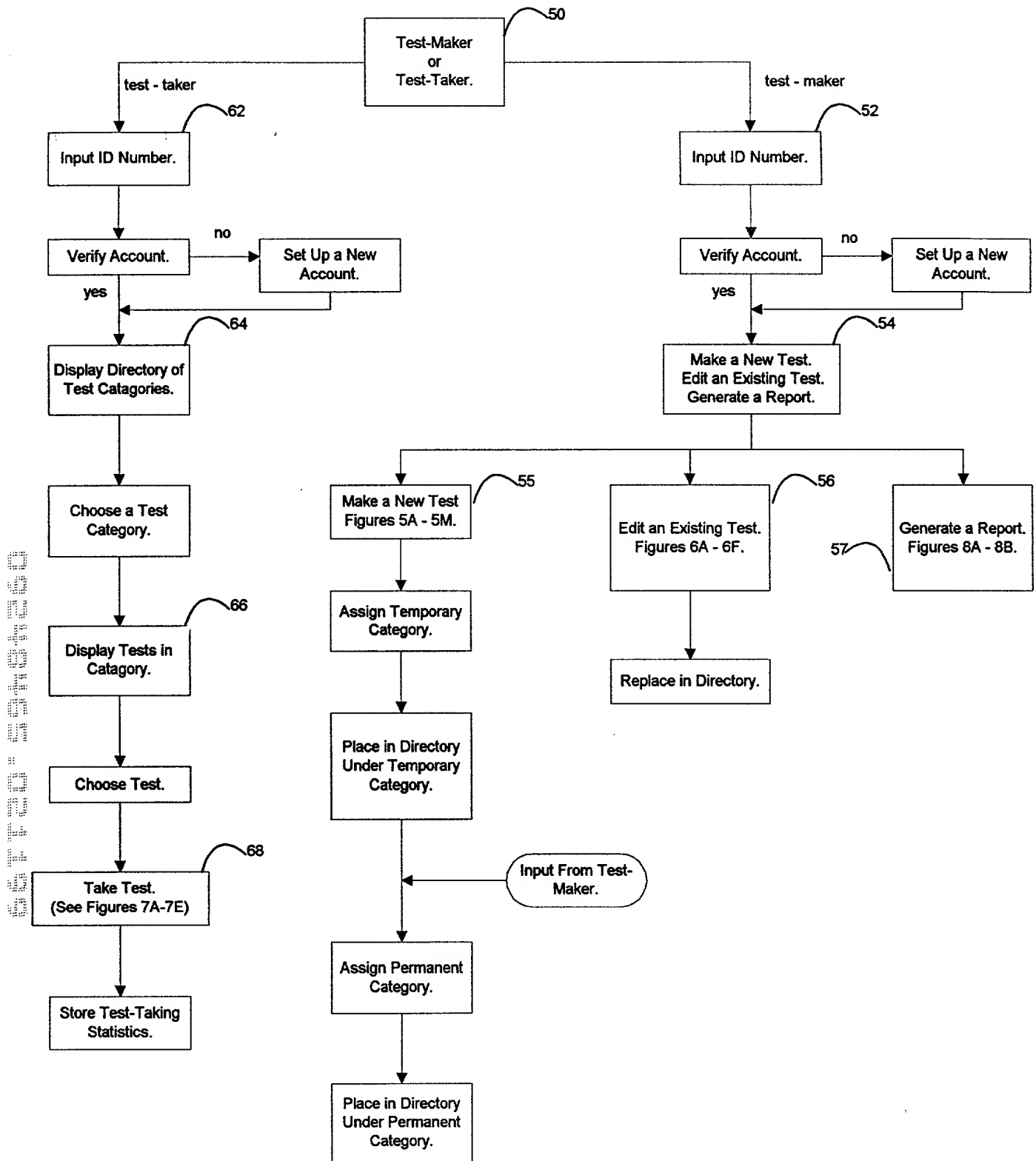


FIG. 4

Quiz Name:	
Header:	
Footer:	
<input type="button" value="Add"/> <input type="button" value="Reset"/>	

FIG. 5A

Quiz Name:	How Many Apples in the Basket?
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.
<input type="button" value="Add"/> <input type="button" value="Reset"/>	

FIG. 5B

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	No <input type="checkbox"/>
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

[Click here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement
-----------	------	--------------------

FIG. 5C

new question	test number: 13337	
question type:	multiple choice ▾	
question:		
Answer Choices (if the question type is multiple choice or multiple answer)	Letter	Answer
	A	
	B	
	C	
	D	
	E	
Correct Answer(s) (If this is a multiple choice or multiple answer question, enter the correct letter for the answer.)	Answer	Value
		1
		1
		1
		1
		1
explanation:		
<input type="button" value="update"/> <input type="button" value="reset"/>		

FIG. 5D

new question	test number: 13337	
question type:	multiple choice	
question:	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	
Answer Choices (if the question type is multiple choice or multiple answer)	Letter	Answer
	A	6
	B	5
	C	4
	D	3
	E	2
Correct Answer(s) (If this is a multiple choice or multiple answer question, enter the correct letter for the answer.)	Answer	Value
	C	15
	B	5
	D	5
	A	1
	E	1
explanation:	<p>Five (5) apples are in the basket. 5 apples</p> <p>One (1) apple drops into the basket. $5+1 = 6$ apples</p> <p>Two (2) apples fall out. $6-2 = 4$ apples</p>	
<input type="button" value="update"/> <input type="button" value="reset"/>		

FIG. 5E

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	No <input checked="" type="checkbox"/>
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Update Test

Reset

Test Options

Click [here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	<div>Add</div> <div>After</div>

FIG. 5F

new question	test number: 13337	
question type:	multiple choice	
question:	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	
Answer Choices (if the question type is multiple choice or multiple answer)	Letter	Answer
	A	True
	B	False
	C	
	D	
	E	
Correct Answer(s) (If this is a multiple choice or multiple answer question, enter the correct letter for the answer.)	Answer	Value
	A	0
	B	5
		1
		1
		1
explanation:	<p>Five (5) apples are in the basket. 5 apples</p> <p>One (1) apple drops into the basket. 5+1=6 apples</p> <p>Two (2) apples fall out. 6-2=4 apples</p> <p>Accordingly, it is FALSE that there are five apples left</p>	
<input type="button" value="update"/> <input type="button" value="reset"/>		

FIG. 5G

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	No
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.
<div>Update Test</div> <div>Reset</div>	

Test Options

Click [here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
2	Multiple Choice	If five apples are in a basket and one more apple drops into the basketand two apples fall out, are there five apples left in the basket?	Add After

FIG. 5H

new question	test number: 13337	
question type:	short answer	
question:	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	
Answer Choices (if the question type is multiple choice or multiple answer)	Letter	Answer
	A	
	B	
	C	
	D	
	E	
Correct Answer(s) (If this is a multiple choice or multiple answer question, enter the correct letter for the answer.)	Answer	Value
	four	15
	4	15
	four apples	15
	4 apples	15
explanation:	<p>Five (5) apples are in the basket. 5 apples</p> <p>One (1) apple drops into the basket. $5+1=6$ apples</p> <p>Two (2) apples fall out. $6-2=4$ apples.</p> <p>According, the correct answer is four (4) apples</p>	
update	reset	

FIG. 5I

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	No <input type="checkbox"/>
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Click [here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
2	Multiple Choice	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	Add After
3	Short Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After

FIG. 5J

new question	test number: 13337	
question type:	multiple answer	
question:	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	
Answer Choices (if the question type is multiple choice or multiple answer)	Letter	Answer
	A	4
	B	four apples
	C	three apples
	D	2 apples
	E	two apples
Correct Answer(s) (If this is a multiple choice or multiple answer question, enter the correct letter for the answer.)	Answer	Value
	A, B	15
	C	5
	D, E	1
		1
		1
explanation:	<p>Five (5) apples are in the basket. 5 apples</p> <p>One (1) apple drops into the basket. $5+1=6$ apples</p> <p>Two (2) apples fall out. $6-2=4$ apples</p> <p>Accordingly "A" (4) and "D" (four apples) are the</p>	
<input type="button" value="update"/> <input type="button" value="reset"/>		

FIG. 5K

Quiz Num:	I3337
Quiz Name:	How Many Apples in the Basket?
Enable:	No <input type="checkbox"/>
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Click here to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
2	Multiple Choice	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	Add After
3	Short Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
4	Multiple Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After

FIG. 5L

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	Yes <input type="checkbox"/>
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Click here to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
<u>1</u>	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
<u>2</u>	Multiple Choice	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	Add After
<u>3</u>	Short Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
<u>4</u>	Multiple Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After

FIG. 5M

You can Create a new Test or view the access report of your existing tests.

To edit a test, enter the Test Number and press the Edit Button,

FIG. 6A

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	No <input type="checkbox"/>
Header:	This is a test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Click [here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
2	Multiple Choice	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	Add After
3	Short Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
4	Multiple Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After

FIG. 6B

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	<input type="button" value="No"/>
Header:	A test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Test Options

Click [here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
2	Multiple Choice	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	Add After
3	Short Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
4	Multiple Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After

FIG. 6C

question number: 1	test number: 13337																						
question type:	multiple choice																						
question:	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?																						
Answer Choices (if the question type is multiple choice or multiple answer)	<table border="1"> <thead> <tr> <th>Letter</th> <th>Answer</th> </tr> </thead> <tbody> <tr><td>A</td><td>6</td></tr> <tr><td>B</td><td>5</td></tr> <tr><td>C</td><td>4</td></tr> <tr><td>D</td><td>3</td></tr> <tr><td>E</td><td>2</td></tr> <tr><td>F</td><td></td></tr> <tr><td>G</td><td></td></tr> <tr><td>H</td><td></td></tr> <tr><td>I</td><td></td></tr> <tr><td>J</td><td></td></tr> </tbody> </table>	Letter	Answer	A	6	B	5	C	4	D	3	E	2	F		G		H		I		J	
Letter	Answer																						
A	6																						
B	5																						
C	4																						
D	3																						
E	2																						
F																							
G																							
H																							
I																							
J																							
Correct Answer(s) (If this is a multiple choice or multiple answer question, enter the correct letter for the answer.)	<table border="1"> <thead> <tr> <th>Answer</th> <th>Value</th> </tr> </thead> <tbody> <tr><td>C</td><td>15</td></tr> <tr><td>B</td><td>5</td></tr> <tr><td>D</td><td>5</td></tr> <tr><td>A</td><td>1</td></tr> <tr><td>E</td><td>1</td></tr> <tr><td></td><td>1</td></tr> <tr><td></td><td>1</td></tr> <tr><td></td><td>1</td></tr> <tr><td></td><td>1</td></tr> <tr><td></td><td>1</td></tr> </tbody> </table>	Answer	Value	C	15	B	5	D	5	A	1	E	1		1		1		1		1		1
Answer	Value																						
C	15																						
B	5																						
D	5																						
A	1																						
E	1																						
	1																						
	1																						
	1																						
	1																						
	1																						
explanation:	<p>Five (5) apples are in the basket. 5 apples</p> <p>One (1) apple drops into the basket. $5+1 = 6$ apples</p> <p>Two (2) apples fall out. $6-2 = 4$ apples</p> <p>Accordingly, the correct answer is (C) four apples.</p>																						
update	reset delete																						

FIG. 6D

Quiz Num:	13337
Quiz Name:	How Many Apples in the Basket?
Enable:	Yes <input checked="" type="checkbox"/>
Header:	A test to determine how many apples are left in the basket.
Footer:	If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

Click [here](#) to add a question, or click the question number to edit an existing question.

Question#	Type	Question Statement	
1	Multiple Choice	Five apples are in a basket. One more apple drops into the basket and two apples fall out of the basket. How many apples are left in the basket?	Add After
2	Multiple Choice	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?	Add After
3	Short Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After
4	Multiple Answer	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?	Add After

FIG. 6F

A test to determine how many apples are left in the basket.
This test is timed!
You have 10 minutes.

Click here to take this test for free	
Question#	Question Statement
1	Five apples are in a basket. One more apple drops into the basket and two apples fall out of the basket. How many apples are left in the basket?
2	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?
3	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?
4	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?
Take this test for free	

FIG. 7A

Test #13337

How Many Apples in the Basket?

You have 10 minutes. Watch the status bar.

Question#	Question Statement
1	Five apples are in a basket. One more apple drops into the basket and two apples fall out of the basket. How many apples are left in the basket? A). <input type="radio"/> 6 B). <input type="radio"/> 5 C). <input type="radio"/> 4 D). <input type="radio"/> 3 E). <input type="radio"/> 2
2	If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket? A). <input type="radio"/> True B). <input type="radio"/> False
3	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket? <input type="text"/>
4	Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket? A). <input type="checkbox"/> 4 B). <input type="checkbox"/> four apples C). <input type="checkbox"/> three apples D). <input type="checkbox"/> 2 apples E). <input type="checkbox"/> two apples
<div>Score It</div>	

FIG. 7B

Test #13337

How Many Apples in the Basket?

You have 10 minutes. Watch the status bar.

Question#	Question Statement
1	<p>Five apples are in a basket. One more apple drops into the basket and two apples fall out of the basket. How many apples are left in the basket?</p> <p>A). <input type="radio"/> 6</p> <p>B). <input type="radio"/> 5</p> <p>C). <input checked="" type="radio"/> 4</p> <p>D). <input type="radio"/> 3</p> <p>E). <input type="radio"/> 2</p>
2	<p>If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?</p> <p>A). <input type="radio"/> True</p> <p>B). <input checked="" type="radio"/> False</p>
3	<p>Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?</p> <p><input type="text" value="4"/></p>
4	<p>Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?</p> <p>A). <input type="checkbox"/> 4</p> <p>B). <input type="checkbox"/> four apples</p> <p>C). <input type="checkbox"/> three apples</p> <p>D). <input checked="" type="checkbox"/> 2 apples</p> <p>E). <input type="checkbox"/> two apples</p>
<p>Score: 11</p>	

FIG. 7C

Test #13337

How Many Apples in the Basket?

Question#	Question Statement
1	<i>Five apples are in a basket. One more apple drops into the basket and two apples fall out of the basket. How many apples are left in the basket?</i> You answered 4, the correct answer is 2. Five (5) apples are in the basket. 5 apples One (1) apple drops into the basket. $5+1 = 6$ apples Two (2) apples fall out. $6-2 = 4$ apples Accordingly, the correct answer is - (C) - four apples.
2	<i>If five apples are in a basket and one more apple drops into the basket and two apples fall out, are there five apples left in the basket?</i> You answered False, which is correct. <div>points = 5</div>
3	<i>Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?</i> You answered 4, which is correct. <div>points = 15</div>
4	<i>Five apples are in a basket. One more apple drops into the basket and two apples fall out. How many apples are left in the basket?</i> You answered 2 apples, the correct answer is three apples . Five (5) apples are in the basket. 5 apples One (1) apple drops into the basket. $5+1=6$ apples Two (2) apples fall out. $6-2=4$ apples Accordingly "A" (4) and "B" (four apples) are the most correct answers.

Score Board

correct answers total: 2 (equivalent to 20 points)
wrong answers total: 2
unanswered questions: 0

If you scored 35, perfect! If you scored more than 20, still pretty good! If you scored 20 or less, not bad. If you scored 15 or less, need improvement. If you scored less than 15, get help, fast.

FIG. 7D

Create a Report

From Date (mm-dd-yyyy)

01-13-1998

To Date (mm-dd-yyyy)

01-13-1999

[Click here to send](#)

FIG. 8A

Test.Com Report from 01-13-1998 to 01-13-1999					
#	Number	Discription	Credits	# Hits	Earnings
1	13336	cindytest	0	0	0
2	13337	How Many Apples in the Basket?	0	0	0
Totals:			0	0	0
These are the most current records.					

FIG. 8B

COMBINED DECLARATION AND POWER OF ATTORNEY
(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Title: INTERNET TEST-MAKING METHOD

the specification of which

- ☒ is attached hereto or
☐ was filed on _____ as Serial No. 0 / _____ or Express
Mail No. _____, as Serial No. not yet known, and was amended on _____.
☐ was described and claimed in PCT International Application No. _____ filed
on _____ and amended under PCT Article 19 on _____ (if any).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations §1.56(a).

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) (34 U.S.C. § 119(e))

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER	FILING DATE
____/____/____	____/____/____
____/____/____	____/____/____
____/____/____	____/____/____

CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. 120

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

PRIOR U.S. OR PCT APPLICATIONS
DESIGNATING THE U.S. FOR BENEFIT UNDER 35 USC 120

APPLICATION NO.	U.S. FILING DATE (day month, year)	STATUS (Patented, Pending, Abandoned)
_____	____/____/____	_____
_____	____/____/____	_____
_____	____/____/____	_____
_____	____/____/____	_____

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

Cynthia S. Murphy, Registration No. 33,430

Warren A. Sklar, Registration No. 26,373

Send Correspondence To

Cynthia S. Murphy
RENNER, OTTO, BOISSELLE & SKLAR, P.L.L.
Nineteenth Floor
1621 Euclid Avenue
Cleveland, Ohio 44115

Direct Telephone Calls To:

(name and telephone number)

Cynthia S. Murphy
(216) 621-1113

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued therein.

Full name of **sole or first inventor** John D. Anderson
Inventor's signature _____
Date _____ Country of Citizenship U.S.A.
Residence Cleveland, Ohio
Post Office Address 2835 South Moreland Boulevard
Cleveland, Ohio 44120

Full name of **second joint inventor**, if any Charles Stack
Inventor's signature _____
Date _____ Country of Citizenship U.S.A.
Residence Cleveland Heights, Ohio
Post Office Address 2501 Arlington Road
Cleveland Heights, Ohio 44118

CHECK FOR ANY OF THE FOLLOWING ADDED PAGE(S) WHICH
FORM A PART OF THIS DECLARATION

____ Signature for third and subsequent joint inventors. Number of pages added ____.

____ Added page to combined declaration and power of attorney for signature by one joint inventor on behalf of omitted inventor(s) who refuses to sign or cannot be reached.

X This declaration ends with this page.

G:\DOCUMENT\CSM\TEST\IP0101\IP0101US.Dec.wpd